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November 8, 2010

Water Docket
U.S. Environmental Protection Agency,
Mail code: 2822T,
1200 Pennsylvania Ave., NW.,
Washington, D.C., 20460

RE: Docket No. EPA-R03-OW-2010-0736
Comments - EPA's Draft Chesapeake Bay TMDL and its Impact on INVISTA, Waynesboro, VA

Dear Madam/Sir:

Thank you for the opportunity to comment on the EPA's Draft Chesapeake Bay Total Maximum Daily Load (Draft TMDL). I am writing on behalf of the INVISTA – Waynesboro manufacturing facility located in Waynesboro, Virginia. INVISTA's Waynesboro site makes a significant contribution to the Virginia economy. As of August 31, 2010, INVISTA employed approximately 500 individuals at the Waynesboro site – not including outside contractors – in a wide variety of roles that include management, administration, R&D, utilities, maintenance, mechanical, project management, and production jobs. Based on an economic multiplier of 4.2 for fiber manufacturing in Virginia (as calculated by the U.S. Dept. of Commerce Bureau of Economic Analysis), INVISTA Waynesboro is responsible for the effect of creating more than 2,000 jobs in the Virginia economy

INVISTA's Waynesboro facility manufactures textile fiber products and has an on-site wastewater treatment plant ("WWTP"). Treated process waters from our industrial processes are permitted to discharge, along with storm water, non-contact cooling water, utility water, and other authorized streams. The *Virginia Pollutant Discharge Elimination System* (VPDES) Permit for the wastewater discharges from our facility to the South River. Permit No. VA0002160 was issued December 2007 by the Virginia Department of Environmental Quality. As a textile fibers manufacturer, the wastewater discharge from INVISTA's Waynesboro WWTP is subject to federal effluent guideline limitations for the Organic Chemical Plastics and Synthetic Fibers ("OCPSF") standards, which are incorporated into the VPDES permit. In addition to the individual VPDES permit, the facility is also subject to the *General Permit for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia*, VAN 010050.

While INVISTA appreciates the efforts by both EPA and the individual states to compile the necessary data and develop the respective WIPs and draft TMDL we nevertheless have some serious concerns. These written comments will focus on the impacts specific to INVISTA – Waynesboro. With respect to our other concerns we refer EPA to the written comments provided by the Virginia Manufacturers Association (VMA) and the Federal Water Quality Coalition.

Backstop Allocations for Virginia Industrial WWTPs Should Be the Same as those Allocations Found in the State WIP

The EPA has proposed imposing backstop allocations for state Watershed Implementation Plans that the Agency has determined do not meet the requested pollutant loading reductions and/or reasonable assurance criteria. EPA has proposed implementing moderate backstop allocations for Virginia point sources. Under a moderate backstop, the waste load allocations (WLAs) for industrial WWTPs and non-significant WWTPs are assumed to be at the same level as the Virginia draft Phase I WIP allocations.

INVISTA agrees that the current WLA established by Virginia general nutrient permit (including INVISTA – Waynesboro), and reflected in the draft Phase I WIP and Draft TMDL, are appropriate for industrial discharges, including significant industrial dischargers. But even more importantly, no matter the results of the Agency's evaluation of the Virginia WIP, WLA's for industrial dischargers should never be less than those specified in the state's WIP. The Virginia waste load allocations established by the state's *General Permit for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Bay Watershed*, and by extension, the Virginia WIP allocations, are based on a long history of modeling exercises, data collection and on-the-ground research. Virginia's proposal has been fully vetted through notice and comment rulemaking. The modeling and data analysis has been transparent and enabled all stakeholders to understand the process and the data. The Virginia WIP accounts for the facility-specific nature of industrial discharges. The Virginia Department of Environmental Quality (VDEQ) has taken the time to understand how the differing process and wastewater characteristics as well as economics of each industrial facility results in varying wastewater discharge characteristics and thus differing impacts on water quality. With this in mind and based on extensive modeling and data analysis, the VDEQ has matched the appropriate WLAs with each industrial facility. EPA cannot ignore the work conducted by VDEQ and thus should not apply arbitrary nutrient loading limits as a result of its backstop efforts.

Backstop Allocations Must Be Based on the Characteristics of Industrial Facilities

The Draft TMDL, as part of its high level and full backstop allocation descriptions, proposes to reduce the WLAs for industrial WWTPs to "a level where the reduction rates for significant industrial WWTPs by jurisdiction are equivalent to the significant municipal WWTP reduction from WIP to E3 (3 mg/l TN and 0.1 mg/l TP)." Applying concentration performance capability similar to a POTW upon an industrial facility is inappropriate. As we understand, the high level and full backstop allocations are based on the ability of publicly owned treatment

works (POTW) to meet these limits through facility upgrades. However, the assumptions made and data evaluated for influent nitrogen and phosphorus concentrations and treatment and design capabilities at POTWs are not applicable to industrial operations, such as ours, that are generating and treating an entirely different wastewater stream.

The INVISTA - Waynesboro facility operations provide some information that demonstrates the importance of this concern. The prior owner of the Waynesboro facility added an anoxic biological nutrient removal (BNR) system at a significant capital cost in 1999, and thereafter enhanced the system's denitrification capabilities, with additional recirculation measures in 2003. The facility's wastewater treatment plant is equipped with a steam injection system to maintain temperatures favorable for nitrifying bacteria growth even during winter months. As a result of adding BNR and optimizing temperatures during the winter, during normal facility loading, the INVISTA-Waynesboro's WWTP reduces influent TN from an estimated annual average of 75 mg/L to 18 mg/L, an approximately 75 percent reduction. Thus, if the proposed backstops for significant POTW were to be applied to INVISTA-Waynesboro, or other similar industrial facilities during implementation of the WIP for the TMDL, even after the facility's substantial investment in BNR technology, we know based on available information that it is not technically feasible to meet a 4 mg/L annual average TN discharge limit.

INVISTA respectfully suggests that it may be premature for EPA to impose such limits on dischargers other than a category EPA has studied. As a textile fibers manufacturer, the wastewater discharge from INVISTA's Waynesboro WWTP is subject to federal effluent guideline limitations for the Organic Chemical Plastics and Synthetic Fibers ("OCPSF") standards, which are incorporated into the VPDES permit. EPA has not established technology-based effluent limitations for either nitrogen or phosphorus for an OCPSF facility. Were EPA to propose technology-based effluent guideline limitations for these parameters, it would undergo an extensive rulemaking effort that included gathering and evaluating detailed wastewater influent, treatment and discharge information from the dischargers – municipal, industrial, or otherwise – that it intended to regulate with such standards. EPA should similarly collect and evaluate information from dischargers in the federal effluent category prior to imposing a limitation developed for POTWs that industries like INVISTA may or may not be able to meet with current technology.

Total Suspended Solids is Not An Equivalent Measurement for In Stream Sediment

TSS and sediment are not the same; however EPA is using TSS as a surrogate for sediment. TSS from a treated point source is not a significant contributor to the impairment in the Bay. Rather, sediment resulting from stream bank erosion and soil run-off is the parameter that EPA is targeting. Section *4.7.7 Streambank and Tidal Shoreline Erosion* of the Draft TMDL indicates that on a watershed-wide basis, the estimate is for about 70 percent of the sediment delivered to the Bay from erosion from land and 30 percent from bank erosion.

Reductions to the INVISTA-Waynesboro Total Suspended Solids Allocation is Inappropriate

EPA states in its proposed Draft TMDL that Virginia's WIP meets, and in fact, is 12% under the target allocations for sediment (See Section 8.2.3 *Summary of Results of EPA Evaluation of Draft Phase I*). Given this acknowledgment, EPA provides no explanation for the decrease in INVISTA-Waynesboro TSS allocations as reflected in Appendix Q of the Draft TMDL.

The TSS limit for the INVISTA Waynesboro WWTP was established based on the federal Effluent Guideline Limitations for the Organic Chemical Plastics and Synthetic Fibers ("OCPSF") industry (40CFR 414). For OCPSF facilities, the technology-based effluent limitations were developed using TSS concentrations and wastewater treatment flow to calculate the mass limits that are in the site's existing VPDES permit. The TSS concentration was determined based on the Effluent Limitation Guideline Subcategory, which for the INVISTA-Waynesboro site ranges from 36 to 67 mg/l. The effluent guidelines have been developed using modeling exercises, data collection and on-the-ground research. The EPA effluent guidelines have been fully vetted through notice and comment rulemaking. As the EPA has an appropriate, established process to implement mass-based limits on the facility WWTP, it is not clear from the Draft TMDL how and why a 5 mg/l edge of stream (EOS) concentration has been applied to the TSS load for industrial dischargers.

The facility's current TSS permitted annual load is 0.0883 million pounds per year (based on VPDES permit monthly average of 110 kg/day). Appendix Q of the Draft TMDL lists a total sediment load of 0.021928 million pounds per year for the Waynesboro facility. This is a 75% reduction from the facility's current TSS VPDES permit limit. INVISTA-Waynesboro estimates that it would cost approximately $900,000 to install effluent filtration to achieve this significant TSS reduction. If finalized, the Draft TMDL would require INVISTA-Waynesboro to expend significant funds in an instance where the Agency's science inaccurately compares TSS to sediment, the Agency ignores its own technology based effluent guidelines and for which no benefit has been established.

The Comment Period was Insufficient to Allow for the Preparation and Submission of Informed Rebuttal Comments

The Executive Summary of the Draft Chesapeake Bay TMDL states that this TMDL "will be the largest and most complex thus far – it is designed to achieve significant reductions in nitrogen, phosphorus and sediment pollution throughout a 64,000-square-mile watershed that includes the District of Columbia and large sections of six states. The TMDL is actually a combination of 92 smaller TMDLs for individual Chesapeake Bay tidal segments . . ." [See Draft TMDL, page iv] EPA and the states have spent years collecting data, refining models, developing pollutant allocations and strategizing implementation, yet despite the significance and enormity of this draft TMDL, the Agency cut in half the typical 90-day comment period. Due to the complexity of the TMDL and the number of affected parties, the EPA's comment period of 45 days is too short to allow for the development of substantive comments. After the Agency considers the many comments it will receive and after the each state has updated its WIP, EPA should reopen the Draft TMDL for a more appropriate 90-day comment period.

I appreciate the opportunity to comment on the EPA's Draft Chesapeake Bay Total Maximum Daily Load (TMDL). If you have questions or comments, please do not hesitate to contact me or Brenda Kennell (for technical comments) at the address on the letterhead.

Sincerely,

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INVISTA

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